## **AMENDMENTS TO THE CLAIMS**

- (Currently Amended) A method of detecting transitions in video comprising:
   acquiring a video stream;
   dividing said the video stream into a plurality of sub-sections;
   determining a probability of whether a one or more synthesized transition effect is effects are
   present at one of the plurality of sub-sections of said the video stream, wherein the one or
   more transition effects are of a specified number and a specified type; and
   embedding-said the probability into said the sub-section of said the video stream.
- 2. (Currently Amended) The method of Claim 1 claim 1, wherein said the determining said probability is performed by a classifier.
  - 3. (Currently Amended) The method of Claim 2-claim 2, wherein said-the classifier is provided a fixed-sized portion of said sub-section.
  - 4. (Currently Amended) The method of Claim 1 claim 1, further comprising outputting a location of said the one or more transition effect and a duration of said the one or more transition effect effects in said the video stream.
  - 5. (Cancelled)
  - 6. (Currently Amended) The method of Claim 1-claim 1, wherein said-the transition is comprises one or more of the following: a dissolve, a fade, a wipe, a iris, a funnel, a mosaic, a roll, a door, a push, a peel, a rotate, or and a special effect.

## 7-10. (Cancelled)

- 11. (Currently Amended) A method of processing video comprising:
  - acquiring a first shot and a second shot from a plurality of video streams, said-the shots comprising a transition free video stream;
  - determining a duration of a transition sequence based on probability distribution, the transition sequence including one or more synthesized transition effects of a specified number and a specified type;
  - generating the transition sequence of the duration, the transition sequence having the one or more transition effects;
  - generating a video sequence comprising the transition sequence from said the first shot to said

    the second shot for said the determined duration, wherein the transition sequence is

    inserted into the video sequence; and

training a classifier to detect a transition effect within said the generated video sequence.

- 12. (Currently Amended) The method of Claim 11-claim 11, wherein said the probability distribution represents a fixed duration.
- 13. (Currently Amended) The method of Claim 11 claim 11, wherein said the transition sequence is comprises one or more of the following: a dissolve, a fade, a wipe, a iris, a funnel, a mosaic, a roll, a door, a push, a peel, a rotate, or and a special effect.
- 14-18. (Cancelled)
- 19-23. (Cancelled)
- 24-25. (Cancelled)

- 26. (Currently Amended) A machine-readable medium that provides having sets of instructions, which, when executed by a set of one or more processors machine, cause said set of processors to perform operations comprising causes the machine to:
  - acquire one or more video streams and a probability distribution, said the video stream including a shot description;
  - determining determine a duration of a transition sequence according to said the probability distribution, said transition sequence including one or more synthesized transition effects of a specified number and a specified type;
  - selectingselect, at random, a first shot and a second shot from the one or more video streams, each shot being transition free;
  - generating generate said the transition sequence of said the duration, said the transition sequence including a one or more transition effect effects; and
  - training a classifier to detect said the one or more transition effect effects within said the generated transition sequence.
- 27. (Currently Amended) The machine-readable medium of claim 26 wherein said the one or more transition effect includes effects include a portion of said the first shot and a portion of said the second shot.
- 28. (Currently Amended) The machine-readable medium of claim 26 wherein said-the video transition sequence includes a portion of said-the first shot before said-the transition effect, said-said the one or more transition-effect effects, and a portion of said-the second shot after said one or more transition-effect effects.
- 29. (Currently Amended) The machine-readable medium of claim 26 wherein said the one or more transition effect is effects comprise one or more of the following: a dissolve, a fade, a wipe, a iris, a funnel, a mosaic, a roll, a door, a push, a peel, a rotate, or and a special effect.

- 30. (Currently Amended) The machine-readable medium of claim 26, further comprisings training a classifier to detect said the one or more transition effect effects within said the generated transition sequence.
- 31. (Currently Amended) The method of claim 11, further comprising:

  training a classifier to detect a the one or more transition effect effects within said the generated video sequence.
- 32. (Currently Amended) A system comprising:
  - a transition synthesizer module to generate a video sequence the video sequence comprising a transition sequence having one or more synthesized transition effects of a specified number and a specified type, wherein prior to generating the video sequence, a duration of the transition sequence is determined based on a probability distribution; and a classifier module, the classifier module to be trained to identify a transition effect based on the generated video sequence.
- 33. (Original) The system of claim 32, wherein the transition synthesizer module to generate the video sequence using random video shots from a plurality of video streams, the video shots being transition free.
- 34. (Currently Amended) The system of claim 32, wherein each synthesized transition effect is associated with a-the duration based on a-the probability distribution.
- 35. (Original) The system of claim 32, wherein the training of the classifier module comprises rescaling a time series of frame-based feature values associated with the generated video sequence.